# DEC STD 188-0 Archiving Engineering Information: Policy and Procedures

**DOCUMENT IDENTIFIER:** A-DS-EL00188-00-0000 Rev B2, 01-Mar-1990

**ABSTRACT:** This standard describes what information should be submitted for archiving, who should submit information, and how to make requests for information from the archive. Archive categories and labeling requirements for all types of media are included.

**APPLICABILITY:** Mandatory for all Digital personnel involved in archiving information.

**STATUS:** APPROVED 01-Mar-1990; use VTX SMC for current status.

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| Responsible Person: | Gerry Marini | | |

APPROVAL: This document was originally approved by the Engineering Committee for use throughout Digital. Revisions B1 and B2 incorporate clerical changes only.

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# 1 INTRODUCTION

Digital maintains archives to provide secure off-site storage facilities for its engineering information. It is the corporate policy of Digital that a reproducible copy of all essential information be collected and stored in designated archives.

The reasons for collecting and storing engineering information in the archives are:

a. To make information available in the event of a product liability suit

b. To protect important information and facilitate its retrieval, should the original not be recoverable

c. To allow Digital to document and defend its patent rights

d. To create an archive for the preservation of historical design information

Engineering information should be submitted to the archive when it is released (signed-off), or when essential non-released (not signed-off) information has accumulated to the point where storage and control is needed.

## 1.1 PURPOSE

The purpose of this standard is to define Digital policy and procedures for archiving engineering information. Engineering information is defined as anything requiring an Engineering documentation identifier per *DEC STD 012-0 Part Identification Standard.*

## 1.2 SCOPE

This standard establishes what engineering information should be stored in the archives, who should submit it, when it should be submitted, and the criteria used in classifying documents by risk level. This standard also establishes the Data Control Services Archive Administrator as the person who gathers, stores, and controls information submitted to the archive.

This standard is intended as a general guide to the engineering archives while acknowledging that certain archive functions and areas have yet to be defined.

Not all information should be stored in the Engineering Archive. This standard does not apply to financial information such as time cards and purchasing information; information generated from a source already submitting to the Archive or Corporate Records Management; or information generated in a department other than the originator's (it is the responsibility of the originator to submit material and retain a copy of that material).

Image and Information Services can act as a consultant for any archive need.

## 1.3 RESPONSIBILITIES

### 1.3.1 Engineering

The following groups within Engineering are required, as a normal part of their operations, to submit material under their control to the archive using methods and procedures prescribed in this document. Details are provided under subheads 2.3 and 2.5.

a. Engineering Systems, CAD Technical Support

b. Engineering Services Site Design Libraries

c. Engineering Services Design/Drafting Sites

### 1.3.2 Image and Information Services

The Archive Administration:

a. Maintains an index of all information sent to the archive

b. Coordinates the material for shipping and storage

c. Performs periodic storage facility audits to insure the archive's records correspond with material actually in storage; verifies storage and media conditions, and identifies and corrects any problems.

d. Arranges the most efficient means of securing vital operating information for the engineering community, and identifies the archive location that is most suitable for storing the materials.

e. Provides an efficient retrieval of information should the need arise.

Image and Information Services is responsible for the maintenance and control of this standard. For information, contact Gerry Marini. Use $ VTX ELF for the latest location information.

### 1.3.3 Digital Information Services (DIS)

Digital Information Services is responsible for establishing the corporate policy on retention periods and providing information about legal precedent for all records stored in the archive.

### 1.3.4 Corporate Micrographics

All microforms submitted to the archive should be checked for quality prior to submission, using procedures described in *DEC STD 162-0 Micrographics: Format And Quality Requirements For Microfilm.*

## 2 REQUIREMENTS

### 2.1 ARCHIVE CONSIDERATIONS

Before submitting material to Archive Administration, you must first determine if the information meets minimum requirements stated in this standard and if the medium is suitable for storage in the archives. The following points should be considered:

a. All *released* (signed-off) Engineering documentation must be submitted to the Archive. Released Engineering documentation is any documentation which is subject to the Engineering Change Order (ECO) system.

b. How essential is the material to the continuing operation of Digital's products and designs? This information will help determine the classification and storage requirements for the material.

c. Is the material stored on an acceptable medium?

d. Who is responsible for submitting material to the Archive and has an alternate person been chosen? At least two people must assume responsibility for material submitted to the archive.

If you wish to submit material, you must contact the Archive Administration for a user numbering scheme and for information on filling out the necessary transmittal forms.

## 2.2 DOCUMENTS STORED IN THE ARCHIVE

The following types of documents must be stored in the archive:

a. Each revision of engineering documentation (hard copy and magnetic) and associated indexes submitted for control to ES Design Libraries

b. Program Source Files for CADTS tools

c. Engineering Notebooks

## 2.3 WHO MUST SUBMIT MATERIAL

The following groups are required to submit material, using established routing procedures, to the control of the Engineering Archive Administration at regularly scheduled intervals.

a. **Engineering Services Site Design Libraries:** Submit all released engineering drawings, all released engineering design data bases, and all internal use indexes received from Engineering Services Sites.

**NOTE**

**In current practice, most Engineering Services Site Design Libraries, with the exception of Phoenix and Colorado, submit all released original drawings to Corporate Micrographics for filming purposes. All sites must adhere to the filming requirements set forth in DEC STD 162-0.**

b. **Corporate Micrographics:** Submit silver negative film (aperture card or roll format) of all released engineering drawings and corresponding indexes received from ES Site Design Libraries.

c. **Technical Information Process, CAD Technical Support:** Submit component libraries and all source files for CADnet tools and programs (CALDEC, GEMS, IDEA, ROMGEN, SUDS, Wirelist and Post Processor programs).

d. **Data Control Services:** Submit all engineering notebooks and associated silver negative film.

**NOTE**

**Media submitted to the control of the archive differs from failsafe tapes in that Archive Administration maintains total control over the submitted media and provides checks on the storage as well as indexes of the media's contents.**

## 2.4 MEDIA REQUIREMENTS

Archive Administration currently accepts:

a. Magnetic tape -

   1. 1/2-inch, 9-track magnetic tape which has been purchased per Digital's Qualified Vendors List (QVL) and meets purchase specification.
   2. DECtape - 3/4-inch certified magnetic tape

b. Silver negative film

c. Paper (hard copy) - paper should be filmed whenever possible

d. Floppy diskettes

e. Disk packs

Archive Administration currently does not accept diazo-base film. The ammonia residue on diazo-base film will blister the silver negative film and ruin it if stored nearby. DO NOT mix diazo-base film with silver negative film.

## 2.5 LABELING REQUIREMENTS

All submitted material must be labeled in a consistent manner to facilitate its storage, retrieval and transfer. The following paragraphs describe the minimum requirements for labeling.

### 2.5.1 Magnetic Media

All submitted magnetic media must have a label specifying the origin/site location and the Document Identification Number. This physical label must also contain all specific information about content and all information needed to copy or regenerate the media.

All labels on magnetic media, with the exception of half-moon labels, must be typewritten or on computer print-out. Information on half-moon labels must be printed legibly.

**2.5.1.1 DECtape** - DECtapes shall be labeled with:

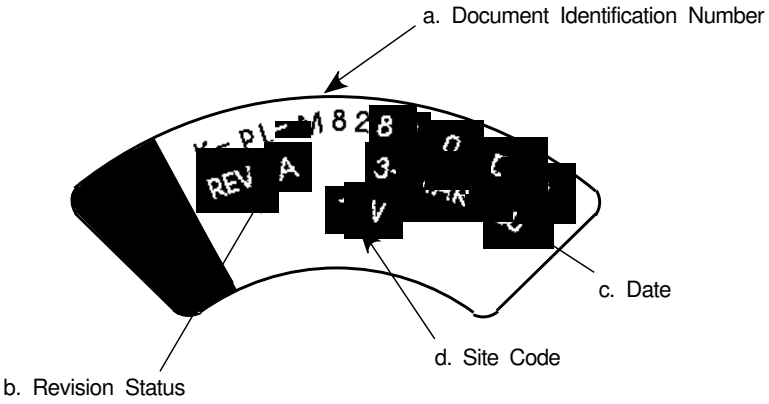
a. Document identification number of medium

b. Revision status

c. Date

d. Site code (For site locations, refer to the Digital Telephone Directory).

Example:




The PDP-10 system used by the archive is compatible with all systems except the PDP-8. PDP-8 tapes, prior to submission to the Archive, must be converted using the OS8 (PIP10) conversion program.

Purple labels indicate that a tape is PDP-10 compatible. Orange labels indicate a PDP-8 tape that requires the OS8 conversion program.

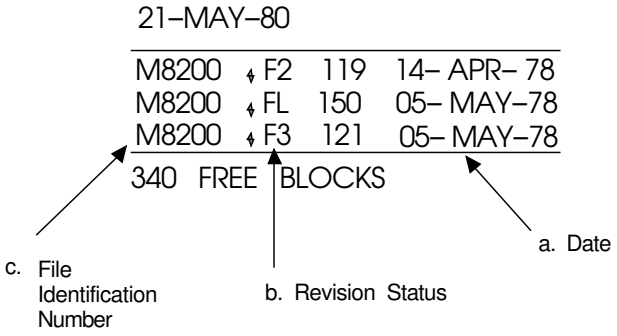
**2.5.1.2 DECtape Directory** - A DECtape directory shall contain:

a. Date (Format: 3-Mar-79)

b. Revision status

c. File identification number

Example:




File Identification numbers on media submitted for archiving must use Alpha-numeric characters, A through Z, 0 through 9. Use of other characters (for example, @ # $ % &) will not allow that file identification number to be indexed in the PDP-10 system used by the archive.

**2.5.1.3 Magnetic Tape** - Magnetic tape shall be labeled with:

a. A unique product/release number

b. Revision status

c. Format (9 track required)

d. Program and version used (BACKUP, BACKUP/INT, FRS, PIP, etc.)

e. Types of files (IDEA, WIRELIST, etc.)

f. Density in bits per inch (BPI)

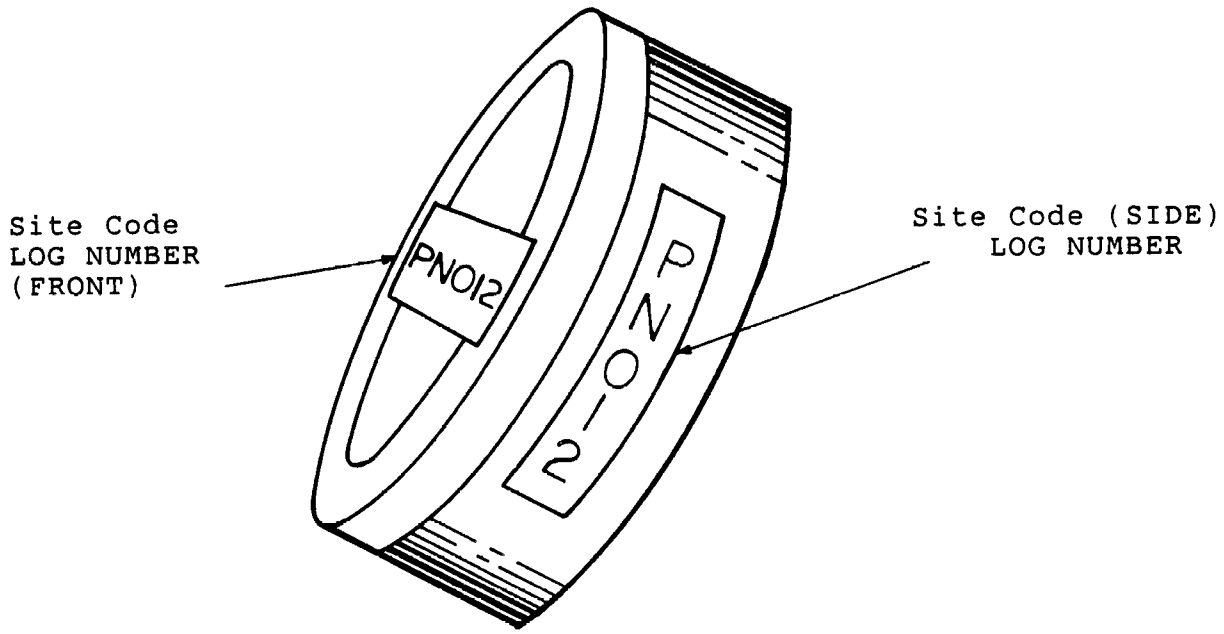
Example:

```
BACKUP start save set ‡ 32K G5359 REV 78,88,89
     by version 2A(313) at 12‡15‡05 on 11-Mar-80
     written on MTA021‡ on S/N 1129 at 1600 9-track
     under TOPS-10 system 603A(3)‡ Cadnet/2 1080 6,03A(003)
E01R26  DBS  3504  <222>      12-Dec-79     DSKB‡  (362,5001)
```

### 2.5.2 Roll Film

Roll film of released engineering documents must have an index that has been given a unique identifier specifying the site code and log number. This unique identifier is assigned by the site submitting the film.

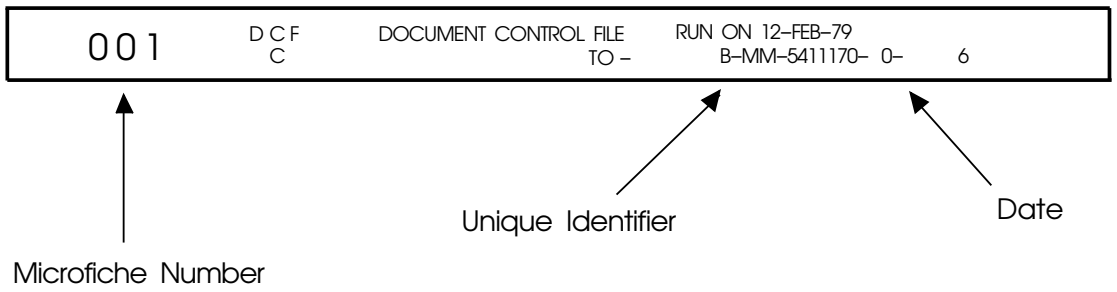
Example:



### 2.5.3 Microfiche/105 mm

Submitted microfiche must be on silver negative film, contain a title strip header with the date, a unique identifier, and a microfiche number.

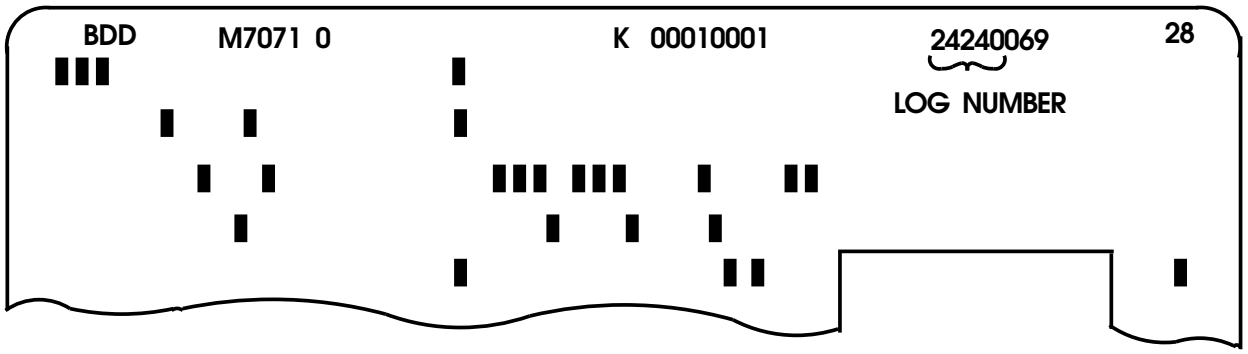
Example:



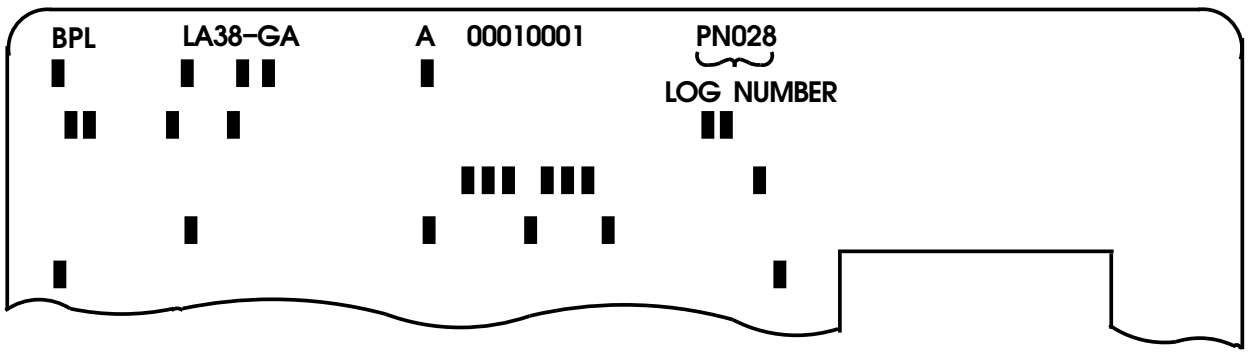

### 2.5.4 Aperture Cards/35 mm

Aperture cards must contain silver negative film and be identified by a log number found in card columns 45-49.

Example: Corporate Micrographics - high volume standard format




Example: Phoenix or Colorado - low volume exceptions



## 2.6 ARCHIVE CATEGORIES

Documents are classified by the Archive Administrator based on their assigned risk category. The risk categories are high, medium, and low and are used for setting retention schedules and determining storage facilities. Guidelines from Corporate Records Management and Legal, combined with user needs and accepted records management practices, are used to determine retention periods.

### 2.6.1 High Risk

The high risk category is assigned to information considered crucial for engineering to continue to support its designs, maintain Digital's shipping commitments to its customers, and its position in the marketplace.

Example: released engineering documentation on magnetic media

### 2.6.2 Medium Risk

This category is assigned to information important to the performance of engineering functions, but can be regenerated or recovered within a reasonable period of time.

Example: CADTS Back-up

### 2.6.3 Low Risk

This category is for information that is important, but current for a very short period of time and periodically updated with more current data.

Example: Archive Administration Master Fiche

### 2.6.4 Permanent Retention

Documents classified as permanent require storage at off-site facilities. Company and legal precedent for the retention of this category of engineering information has not been established. Until formally established, the retention period will be forever.

The following documents are classified as requiring permanent retention:

a. Released data bases

b. Released engineering documentation (hard copy) and related indexes

c. Microcode documentation

d. Engineering notebooks and film (per *DEC STD 141-0 Engineering Notebooks Policy and Requirements*)

e. Document Control File (DCF) film records (manual card system)

### 2.6.5 Temporary Retention

Documents classified as temporary are stored off-site. A temporary classification indicates the document will be stored for less than 20 years—usually for a period ranging from six months to five years.

The Archive Administration works closely with users to determine the storage requirements for a document, with the needs of the user being the foremost consideration.

When the expiration date on a document classified as temporary comes due, the Archive Administrator checks with the user to determine whether the document should be retained in the archive or removed.

The following are classified as requiring temporary retention:

a. Automated and internal operation tools (software programs)

b. Audit reports

The storage methods and retention schedules for all other documents not specifically defined in this standard will be determined at the time of their submission to the archive.

## 2.7 RETRIEVAL

Archive Administration can retrieve documentation from any of its storage sites. The following are reasons for a retrieval:

a. To replace a document or file that has been inadvertently lost, damaged, or destroyed

b. To bring a site back into operation after a disaster

c. To allow Archive Administration to test the retrieval system.

### 2.7.1 Retrieval Requests

All requests to retrieve information must be made to the Archive Administration.

Archive Administration will coordinate the retrieval request with Corporate Records Management (CRM). CRM will accept a retrieval request only from a designated Archive Administrator or representative.

Requests for data base retrieval must come from the Site Design Library coordinator, not directly from a user.

Requests for aperture card retrieval must come from the Corporate Micrographics coordinator.

Requests for all other documents must be made by the Responsible person associated with the document, by an authorized alternate, or manager. The Responsible person must inform the Archive Administration in writing if an alternate is authorized to retrieve a document.

## 2.8 CONTROL AND IDENTIFICATION

Archive Administration maintains and distributes copies of automated indexes of material under its control. These indexes list material stored at all archive sites and facilitate retrieval of data.

The general inventory maintained by Archive Administration is a listing of all items or articles sent off site. The archive also maintains a File-Name index for magnetic media, and an Engineering-log index for non-released engineering drawings.

## 2.9 REFRESH AND VERIFICATION PROGRAMS

To maintain quality media and data integrity, the Archive Administration has in place a quality assurance program.

Magnetic media that has been sent off for permanent retention is subject to a refresh and verification program. This program involves reading and exercising tapes to make sure that the information is still available and to guarantee quality media.

Source documents and microforms are visually checked for damage or deterioration.

# APPENDIX A REFERENCED DOCUMENTS

## A.1 EL-Class Digital Documents

| EL-Class Number | Document Title |
|---|---|
| EL-00012-00 | *DEC STD 012-0 Part Identification Standard* |
| EL-00141-00 | *DEC STD 141-0 Engineering Notebook Policy and Requirements* |
| EL-00162-00 | *DEC STD 162-0 Micrographics: Format and Quality Requirements for Microfilm* |

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